ABSTRACT OF THE DISCLOSURE

The invention relates to a method of transmitting data in a radio channel from a transmitter to a receiver, and to a transmitter and a receiver implementing the method. The method includes setting a radio channel quality requirement according to the user and system information; setting a data transfer delay requirement; determining a radio channel coherence time; channel encoding the data; selecting interleaving depth using the radio channel coherence time and the data transfer delay as decisive parameters; interleaving the channel coded data; if the radio channel quality requirement is not fulfilled, selecting at least one transmit diversity anterna besides the main antenna so that the radio channel quality requirement will be fulfilled; transmitting modulated, interleaved and channel coded data with the selected anternas.